injections of hypertonic sodium solutions for the induction of abortions. Home prepared electrolyte solutions prescribed for the management of gastroenteritis are another source of frequent accidental salt poisoning.

Hypernatremia as a consequence of salt ingestion may be accompanied by dehydration, but the total body sodium in these cases is generally elevated. This is in contradistinction to hypernatremic dehydration from other causes, where there is usually a total body deficit of sodium, and a deficit of water in excess of the deficit in sodium. In the former case, the treatment, to remove the excess sodium as rapidly as possible. This may be achieved most effectively by dialysis procedures.

Salt solutions have not been demonstrated to be reliable emetics and use of them may delay more effective measures. The recommendations for the use of salt solutions as an emetic should be deleted from instructions. Where emesis is indicated, other safer and more effective agents, such as syrup of ipecac, should be employed.

FRANK DEGENARO, M.D.

REFERENCE

DeGenaro F, Nylan WL: Salt—A dangerous "antidote." J Pediatr 78:1048-1049, Jun 1971

Interhospital Infant Transport

Experience has indicated that specialized equipment operated by adequately-trained personnel is necessary when transferring critically ill infants between hospitals to avoid increased risk to the patient. Personnel should include a neonatologist, perinatal nurse, vehicle operator, and other physician staff and nursing personnel as required for the individual transfer. The ambulance or aircraft must accommodate a portable incubator with good lighting, accessibility, temperature control and humidified oxygen source. Electronic monitoring of heart rate, oxygen centration, and blood pressure is advisable and provision for adequate artificial ventilation should be on hand. A portable infusion pump is used for intravenous or intra-arterial fluid administration.

With use of proper equipment by trained personnel, high speed transfer is rarely necessary as intensive care facilities are available for patient use throughout the transport.

In the future, each hospital offering neonatal intensive care will be expected to develop specialized transport facilities for use with their unit.

RICHARD L. THOMPKINS, M.D.

REFERENCES

Unpublished Survey; Infant Health Unit, Bureau of Maternal and Child Health. California Department of Public Health. Nov 1971

Segal S: Transfer of a premature or other high-risk newborn infant to a referral hospital. Pediatr Clin North Am 13:1195-1205, Nov 1966

Triple Vaccine

Recently available triple vaccine for measles, rubella and mumps produces protection against each at about 95 percent. This method would appeal to those who wish to reduce the number of injections, visits and expense.

All children should be immunized against measles because of its severity and sequelae. Duration of protection is uncertain but requires such minute amounts of antibody that one might surmise lifetime immunity.

Rubella is a benign disease in childhood and confers permanent immunity. Most artificially induced immunity lapses with time and the duration is uncertain. The only significant purpose for vaccination of infant boys and girls is to protect their mothers from being infected by them with fetal damage during pregnancy. Only 20 percent of mothers are susceptible, the others having had the disease during childhood. Vaccine *may* prevent infection in childhood (natural infection produces permanent immunity) but lapse before child-bearing years. The girl immunized at one year has not been proved to be protected during pregnancy 20 years later.

Mumps is relatively benign in childhood with very rare exceptions and produces permanent immunity. Vaccination at one year will probably protect through childhood but may very well not extend to adult years when orchitis is a serious complication.

Objections to the proposal to give all year-old infants triple vaccine are theoretical and perhaps philosophical. The physician has an individual responsibility to his patients. He may choose to give measles vaccine at one year and to defer rubella, as the British have done, and mumps to pre-adolescent years for better protection at a more important time. Effective immunity to all three components of triple vaccine persist for two and a half to five years, only possibly into adulthood.

EDWARD B. SHAW, M.D.

REFERENCE

Weibel RE, Beynak EB, Stokes J, et al: Measurement of immunity following live mumps (5 years), measles (3 years) and rubella (2½ years) virus vaccine. Pediatrics 49:334, Mar 1972

Recognition of Serum Hepatitis

The clear association between Australian antigen and serum hepatitis virus establishes methods for identifying the disease. Recently published reports also demonstrate that serum hepatitis virus (currently being named hepatitis B, and contrasting with hepatitis A or infectious hepatitis) may be propagated in the laboratory.

With such means at hand the occurrence of hepatitis B in (1) older age groups, (2) institutional populations, (3) military, (4) drug addicts, (5) those patients requiring blood and blood products, and finally in (6) the immunologically impaired individuals, can be easily recognized.

A number of different methods of detecting hepatitis B have led to recognition of widespread infection with this virus and the realization that blood banks must screen all potential donors, and such screening should utilize the most sensitive detecting systems that will still be simple enough to incorporate into routine laboratory procedures. Comparisons of these methods are being made in a number of laboratories throughout the country. However, more time and effort will be required before any final decisions are rendered. In the meantime, any one of the following methods for detecting serum hepatitis viremia could be used: (1) Double diffusion in agar (1-2 days), (2) complement fixation (2-4 hours), (3) counter immunoelectrophoresis (6 hours), (4) rheophoresis (16-20 hours), (5) isotope immunoassay (18 hours), (6) passive indirect hemagglutination (4 hours).

J. J. QUILLIGAN, M.D.

REFERENCES

Blumberg BS, Sutnick AI, London WT: Australia antigen and hepatitis. JAMA 207:1895-1896, Mar 10, 1969

Carver DH, Seto DSY: Production of hemadsorption-negative areas by serums containing Australia antigen. Science 172:1256-1267, Jun 18, 1971

Hollinger FB, Vorndam V, Dreesman GR: Assay of Australia antigen and antibody employing double-antibody and solid phase radioimmunoassay techniques and comparison with the passive hemagglutination methods. J Immunol 107:1099-1111, Oct 1971

Current Dietary Hazards

With the rising interest in "health foods" and fad diets, a comprehensive dietary history is increasingly important as part of the pediatric health evaluation. Until recently it was necessary to journey to an underdeveloped nation to study rickets, scurvy, and kwashiorkor. Now, so-called "macrobiotic" diets have brought about reappearance of the diseases in the United States. Some parents feed their children a diet of only brown rice and seaweed in the quest for a balance between the opposites of "Yin and Yang," with death or serious illness an occasional result.

Along with the re-emergence of deficiency states, hypervitaminosis A and D are being seen with increasing regularity.

JOHN BOLTON, M.D.

REFERENCES

Zen macrobiotic diets (AMA Council on Foods and Nutrition): JAMA 218:397, Oct 18, 1971

The use and abuse of vitamin A (American Academy of Pediatrics Joint Statement of Committees on Drugs and Nutrition): Pediatrics 48:655-656, Oct 1971